AD-A087 468 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
193098 MLRS, MISSILE NUMBERS 1114, 1098, ROUND NUMBERS V-123, V--ETC(U)
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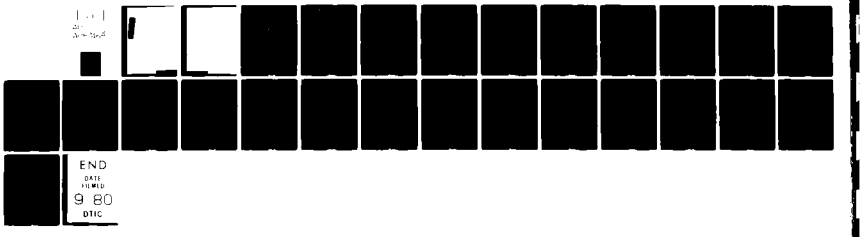

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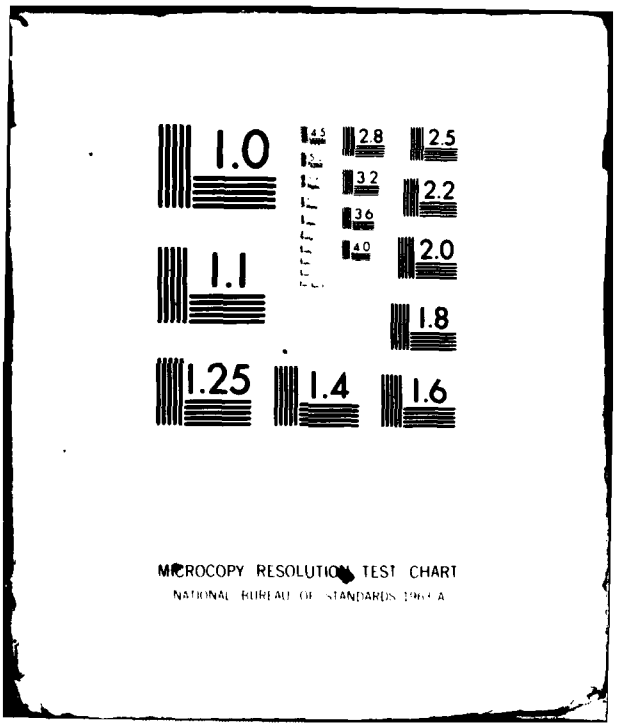
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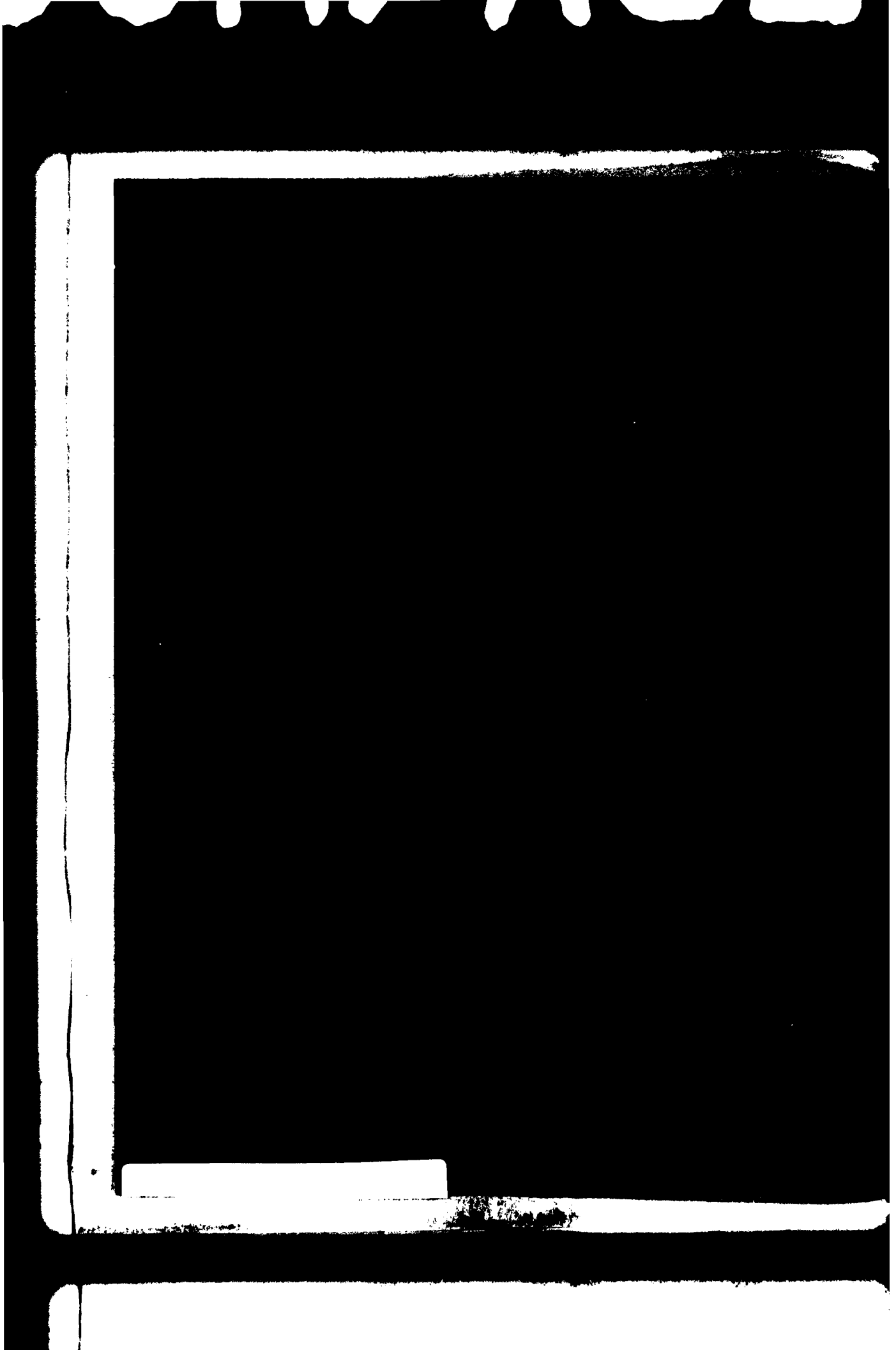

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REPORT DOCUMENTATION PAGE

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18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Meteorological data gathered for the launching of 19309B MLRS, Missile Numbers 1114, 1098, Round Numbers V-123 and V-124 are presented in tabular form.

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CONTENTS

INTRODUCTION

19309B MLRS, Missile Numbers 1114, 1098, Round Numbers V-123 V-124, were launched from LC-39, White Sands Missile Range (WSMR), New Mexico, at 1230, 1346:16 MST, 14 February 1980.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature (^{o}F), relative humidity, dew point (^{o}F), wind direction and speed, and cloud cover were made at the "C" Station Met Site.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

SITE AND ALTITUDE	
LC-39	2km
NICK	2km

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

SITE AND TIME	
LC-37	1230 MST
WSD	1300 MST
LC-37	1415 MST

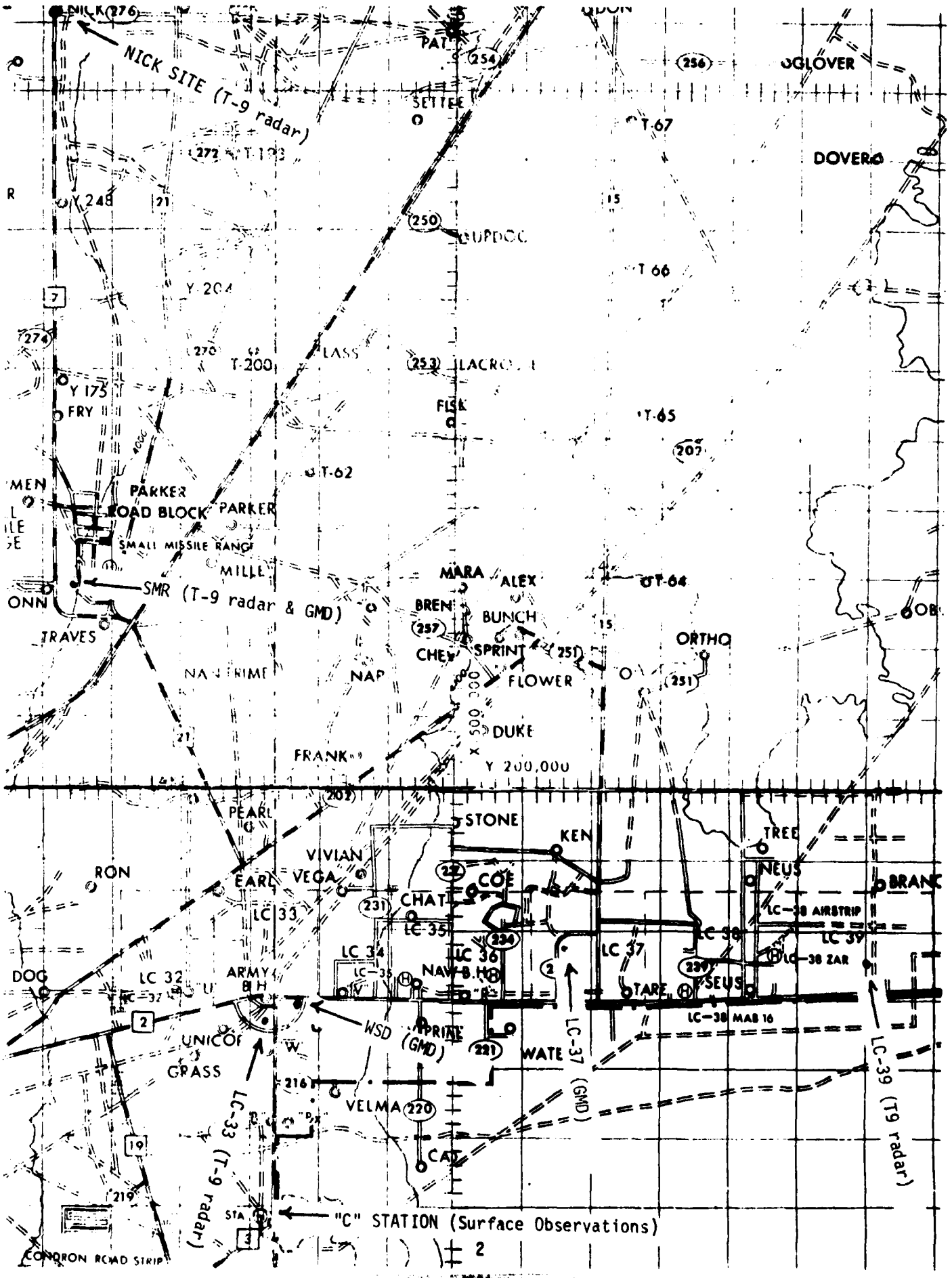
NICK SITE (T-9 radar)
SETTEE
GLOVER
DOVER
T-67
T-66
T-65
T-64
T-62
T-200
Y 248
Y 204
Y 175
FRY
PARKER
ROAD BLOCK
PARKER
SMALL MISSILE RANGE
SMR (T-9 radar & GMD)
TRAVES
MILLE
MARA
ALEX
BREN
BUNCH
SPRINT
FLOWER
ORTHO
CHEV
NAP
DUKE
FRANK
Y 200,000
PEARL
STONE
KEN
TREE
VIVIAN
VEGA
EARL
RON
COE
CHAT
LC 33
LC 35
LC 34
LC 36
LC 37
LC 38
LC 39
LC-38 AIRSTRIP
LC-38 ZAR
LC-38 MAB 16
NAV B.H.
ARMY B.H.
DOG
LC 32
UNICOM
GRASS
WSD
PRINE (GMD)
WATE
VELMA
CAT
LC-37 (GMD)
LC-39 (T9 radar)
LC-33 (T-9 radar)
"C" STATION (Surface Observations)
CONCRON RCMD STRIP

TABLE 1.

SURFACE OBSERVATIONS OBTAINED FROM "C" STATION ON 14 February 1980

TIME MST	SKY CONDITIONS	PVLG VSBY	WEATHER AND OBSTRUCTIONS TO VISION	STA PRES IN hg	TEMP	DEW POINT	DRC IN	SPEED
0058	E600VC	10	RW-	25.925	49	47	160	10
0158	E600VC	10	RW-	25.920	48	47	160	08
0258	E600VC	10	RW-	25.920	49	47	170	13
0358	E600VC	10	RW-	25.925	50	44	140	05
0458	E600VC	15		25.950	49	43	200	12
0558	30SCTE500VC	15	RW-	25.965	48	44	170	11
0658	30SCTE550VC	40		25.935	47	44	170	18
0758	30SCTE55BKN90BKN250BKN	40		25.985	48	43	170	17
0858	30SCT55SCTE250BKN	40		25.990	54	43	160	17
0958	30SCT55SCT90SCTE250BKN	40		26.015	57	50	270	14
1058	30SCTE55BKN250BKN	40		26.030	56	43	190	13
1158	30SCT55SCTE80BKN250BKN	40		25.995	58	43	220	13
1258	30SCTE55BKN80BKN250BKN	40		25.970	58	43	170	11
1358	E55BKN80BKN2500VC	40		25.940	58	31	190	14
1458	E55BKN80BKN250BKN	40		25.940	60	48	190	16
1558	E55BKN80BKN250BKN	40		25.935	60	46	150	11
1658	E55BKN120BKN250BKN	40		25.935	61	44	220	08
1758	E40BKN120BKN2500VC	30		25.970	54	55	200	09
1858	E40BKN	10	RW-	25.970	55	46	220	06
1958	40SCT120SCT	10		25.970	57	43	210	14
2058	40SCT120SCT	10		25.975	57	43	170	12
2158	40SCT120SCT	10		25.975	53	45	E090	12
2258	40SCT	10		25.975	54	45	100	12
2358	40SCT	10		25.975	54	55	130	12

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM NICK DATE 14 February 1980 TIME 1225 MST

TRACKER COORDINATES (WSTM) X= 470,734.56 Y= 255,775.64 H= 4126.57

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL X OR FEET AGL ___.

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	180	10
90	MISG	MISG
150	MISG	MISG
210	231	23
270	220	19
330	222	22
390	230	19
500	230	15
650	225	16
800	227	26
950	222	23
1150	230	29
1350	225	35
1550	223	36
1750	MISG	MISG
2000	MISG	MISG

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

PILOT BALLOON MEASURED WIND DATA

TABLE 3

RELEASED FROM LC-39 DATE 14 February 1980 TIME 1230 MST

TRACKER COORDINATES (WSTM) X= 530,938.82 Y= 186,564.96 H= 4063.75

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL x OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	175	05
90	180	08
150	179	14
210	160	14
270	180	15
330	190	10
390	217	13
500	216	15
650	236	18
800	234	22
950	241	26
1150	236	35
1350	230	39
1550	230	37
1750	225	38
2000	232	38

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

PILOT BALLOON MEASURED WIND DATA

TABLE 4

RELEASED FROM LC-39 DATE 14 February 1980 TIME 1345 MST

TRACKER COORDINATES (WSTM) X= 530,938.82 Y= 186,564.96 H= 4063.75

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL X OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	230	08
90	230	11
150	236	14
210	232	16
270	236	16
330	232	15
390	228	15
500	228	21
650	229	23
800	229	28
950	230	27
1150	240	34
1350	242	38
1550	241	44
1750	244	53
2000	247	54

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

SIGNIFICANT LEVEL DATA

STATION ALTITUDE 4047.27 FEET MSL
14 FEB. 80 1230 HRS MST
ASCENSION NO. 17

0450180017
LC-37

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 5

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
877.7	4047.3	16.1	7.6	57.0
850.0	4936.4	11.7	4.4	61.0
700.0	10171.3	.6	-1.6	84.0
593.2	14467.7	-9.0	-9.1	99.0
535.4	17055.5	-13.9	-14.0	99.0
527.4	17430.8	-15.4	-17.2	86.0
519.4	17809.3	-17.0	-34.1	21.0
511.4	18193.2	-15.9	-25.9	50.0
500.0	18751.6	-16.4	-25.6	44.0
457.8	20909.9	-21.9	-36.1	26.0
400.0	24129.2	-29.4	-41.1	31.0
379.8	25340.0	-32.1	-40.9	41.0
327.6	28715.3	-40.6	-49.3	38.0
300.0	30671.4	-44.7		
286.0	31719.4	-46.8		
250.0	34639.0	-49.5		
217.4	37667.4	-47.5		
200.0	39476.3	-49.4		
150.0	45587.7	-56.8		

UPPER AIR DATA
0450180017
LC-37

TABLE 6

STATION ALTITUDE 4047.27 FEET MSL
14 FEB. 80 1230 HRS MST
ASCENSION NO. 17

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4047.3	877.7	16.1	7.6	57.0	1052.3	664.1	220.0	10.1	1.000282
4500.0	863.5	13.9	6.0	59.0	1043.8	661.4	223.7	13.2	1.000276
5000.0	848.0	11.6	4.4	61.3	1033.7	658.6	226.2	16.6	1.000269
5500.0	832.4	10.5	3.9	63.5	1018.6	657.3	227.9	20.0	1.000265
6000.0	817.1	9.4	3.4	65.7	1003.7	656.1	229.1	23.4	1.000261
6500.0	802.1	8.4	2.8	67.9	989.0	654.8	229.9	26.9	1.000256
7000.0	787.4	7.3	2.2	70.1	974.6	653.6	230.3	30.1	1.000252
7500.0	772.9	6.3	1.7	72.3	960.4	652.3	230.5	33.3	1.000247
8000.0	758.7	5.2	1.0	74.5	946.4	651.0	230.9	34.3	1.000243
8500.0	744.8	4.1	.4	76.7	932.7	649.8	231.2	34.2	1.000239
9000.0	731.1	3.1	-.2	78.9	919.1	648.5	231.6	34.0	1.000235
9500.0	717.6	2.0	-.9	81.1	905.8	647.2	232.2	32.4	1.000231
10000.0	704.5	1.0	-1.5	83.2	892.7	645.9	232.9	30.8	1.000226
10500.0	691.2	-.1	-2.3	85.1	879.5	644.6	233.6	29.3	1.000222
11000.0	678.0	-1.3	-3.1	86.9	866.3	643.3	233.4	29.0	1.000218
11500.0	665.1	-2.4	-4.0	88.6	853.4	641.9	237.1	28.8	1.000214
12000.0	652.4	-3.5	-4.8	90.4	840.7	640.5	239.0	28.6	1.000210
12500.0	639.9	-4.6	-5.7	92.1	828.2	639.2	241.8	30.3	1.000206
13000.0	627.7	-5.7	-6.5	93.9	815.8	637.8	244.3	32.1	1.000202
13500.0	615.7	-6.8	-7.4	95.6	803.7	636.4	246.3	34.5	1.000198
14000.0	604.0	-8.0	-8.3	97.4	791.8	635.1	247.6	38.5	1.000194
14500.0	592.4	-9.1	-9.2	99.0	780.0	633.7	248.6	42.6	1.000190
15000.0	580.8	-10.0	-10.1	99.0	767.5	632.5	247.9	47.5	1.000186
15500.0	569.4	-11.0	-11.1	99.0	755.3	631.4	247.0	52.7	1.000183
16000.0	558.3	-11.9	-12.0	99.0	743.2	630.2	247.2	54.2	1.000179
16500.0	547.3	-12.8	-13.0	99.0	731.3	629.0	247.7	54.7	1.000176
17000.0	536.6	-13.8	-13.9	99.0	719.7	627.9	253.1	55.0	1.000172
17500.0	525.9	-15.7	-19.2	74.1	711.0	626.4	258.9	57.0	1.000166
18000.0	515.4	-16.5	-28.2	35.4	699.2	624.3	262.5	64.1	1.000159
18500.0	505.1	-16.2	-24.9	46.7	684.3	624.7	264.2	66.8	1.000157
19000.0	495.0	-17.0	-26.9	41.9	672.9	623.6	265.1	67.0	1.000154
19500.0	484.9	-18.3	-29.1	37.8	662.6	622.0	266.1	64.8	1.000151
20000.0	475.1	-19.6	-31.5	33.6	652.5	620.5	267.1	62.1	1.000148
20500.0	465.5	-20.9	-34.0	29.4	642.6	618.9	266.7	62.4	1.000145
21000.0	456.1	-22.1	-36.3	26.1	632.7	617.3	265.9	63.4	1.000143
21500.0	446.6	-23.3	-37.0	26.9	622.5	615.9	265.1	64.3	1.000140
22000.0	437.3	-24.4	-37.7	27.7	612.5	614.4	264.7	64.2	1.000138
22500.0	428.3	-25.6	-38.5	28.5	602.6	613.0	264.2	64.1	1.000136
23000.0	419.4	-26.8	-39.3	29.2	592.9	611.6	263.5	63.6	1.000133
23500.0	410.7	-27.9	-40.1	30.0	583.4	610.1	262.3	61.9	1.000131

STATION ALTITUDE 4047.27 FEET MSL
14 FEB. 80 1230 HRS MST
ASCENSION NO. 17

UPPER AIR DATA
0450180017
LC-37

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 6 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	402.2	-29.1	-40.9	30.8	574.0	608.7	261.0	60.2	1.000129
24500.0	393.7	-30.2	-40.9	34.1	564.5	607.2	259.3	58.4	1.000127
25000.0	385.4	-31.3	-40.8	38.2	555.1	605.9	257.3	56.7	1.000125
25500.0	377.1	-32.5	-41.3	40.9	545.9	604.4	255.4	54.9	1.000123
26000.0	369.0	-33.8	-42.5	40.4	536.9	602.8	254.0	53.0	1.000121
26500.0	361.0	-35.0	-43.3	40.0	528.0	601.2	252.6	51.2	1.000118
27000.0	353.2	-36.3	-45.0	39.5	519.3	599.6	252.2	49.7	1.000116
27500.0	345.5	-37.5	-46.3	39.1	510.8	598.0	251.7	48.2	1.000114
28000.0	338.0	-38.8	-47.5	38.6	502.4	596.4	252.7	48.4	1.000112
28500.0	330.7	-40.1	-48.8	38.2	494.2	594.8	253.8	49.0	1.000111
29000.0	323.4	-41.2	-51.2	32.5**	485.7	593.3	255.7	51.8	1.000109
29500.0	316.2	-42.2	-55.1	22.8**	477.1	592.0	257.7	56.3	1.000106
30000.0	309.2	-43.3	-60.4	13.0**	468.6	590.6	259.4	62.2	1.000104
30500.0	302.3	-44.3	-71.0	3.3**	460.3	589.3	260.5	71.2	1.000103
31000.0	295.5	-45.4			452.0	588.0	261.3	80.2	1.000101
31500.0	288.9	-46.4			443.7	586.7	261.6	89.7	1.000099
32000.0	282.3	-47.1			435.0	585.8	261.8	99.3	1.000097
32500.0	275.9	-47.5			426.0	585.2	262.3	102.6	1.000095
33000.0	269.6	-48.0			417.1	584.6	262.9	105.1	1.000093
33500.0	263.5	-48.4			408.5	584.0	263.6	105.3	1.000091
34000.0	257.5	-48.9			400.0	583.4	264.4	104.6	1.000089
34500.0	251.6	-49.4			391.7	582.8	264.7	106.5	1.000087
35000.0	245.9	-49.3			382.6	582.9	264.8	109.4	1.000085
35500.0	240.3	-48.9			373.3	583.4	264.8	111.1	1.000083
36000.0	234.8	-48.6			364.2	583.8	264.8	112.6	1.000081
36500.0	229.4	-48.3			355.4	584.2	264.8	113.2	1.000079
37000.0	224.2	-47.9			346.8	584.6	264.8	112.8	1.000077
37500.0	219.1	-47.6			338.4	585.1	264.8	112.7	1.000075
38000.0	214.1	-47.8			331.0	584.8	264.4	114.5	1.000074
38500.0	209.2	-48.4			324.2	584.1	264.1	116.4	1.000072
39000.0	204.4	-48.9			317.6	583.4	263.8	117.9	1.000071
39500.0	199.8	-49.4			311.1	582.7	263.5	119.2	1.000069
40000.0	195.1	-50.0			304.7	581.9	263.5	119.0	1.000068
40500.0	190.6	-50.6			298.4	581.1	263.7	117.2	1.000066
41000.0	186.2	-51.2			292.2	580.3	264.0	115.6	1.000065
41500.0	181.8	-51.9			286.2	579.5	264.7	114.3	1.000064
42000.0	177.6	-52.5			280.3	578.7	265.4	113.1	1.000062
42500.0	173.5	-53.1			274.6	578.0	266.0	112.2	1.000061
43000.0	169.4	-53.7			268.9	577.2	266.6	111.5	1.000060
43500.0	165.5	-54.3			263.4	576.4			1.000059

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4047.27 FEET MSL
14 FEB. 80 1230 HRS MST
ASCENSION NO. 17

0450180017
LC-37

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 6 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	161.6	-54.9			258.0	575.6			1.000057
44500.0	157.9	-55.5			252.7	574.8			1.000056
45000.0	154.2	-56.1			247.5	574.0			1.000055
45500.0	150.6	-56.7			242.4	573.2			1.000054

STATION ALTITUDE 3989.00 FEET MSL
14 FEB. 80 1300 HRS MST
ASCENSION NO. 86

SIGNIFICANT LEVEL DATA
04500200
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 8

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
879.0	3989.0	14.3	5.7	56.0
857.6	4673.8	15.0	3.5	46.0
850.0	4920.0	11.9	2.6	53.0
827.6	5649.8	8.2	.4	58.0
748.8	8336.6	1.9	1.8	99.0
700.0	10117.1	-.9	-1.0	99.0
664.0	11501.4	-2.2	-2.3	99.0
618.8	13331.4	-6.2	-6.5	98.0
601.2	14073.7	-6.8	-6.3	89.0
584.0	14817.5	-8.3	-9.0	95.0
575.4	15196.1	-9.0	-10.3	90.0
542.0	16710.6	-12.1	-14.6	80.0
517.4	17872.9	-15.1	-22.1	55.0
500.0	18719.9	-17.4	-24.9	52.0
462.2	20641.0	-21.8	-26.2	67.0
439.6	21851.3	-23.6	-28.5	64.0
424.8	22672.1	-25.5	-27.5	83.0
400.0	24097.4	-29.2	-37.1	46.0
382.6	25139.0	-31.2	-39.2	45.0
329.4	28569.9	-39.7	-49.0	36.0
300.0	30656.8	-43.6		
280.4	32139.5	-47.9		
250.0	34624.5	-49.2		
216.0	37795.8	-47.4		
200.0	39462.8	-50.0		
165.8	43478.9	-52.6		
150.0	45589.4	-57.2		
142.0	46727.6	-59.0		

STATION ALTITUDE 4047.27 FEET MSL
14 FEB. 60 1230 HRS MST
ASCENSION NO. 17

MANDATORY LEVELS
0450180017
LC-37

GEODETIC COORDINATES
32.41141 LAT (EG
106.30852 LON (EG

TABLE 7

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL.HUM.*	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	4933.	11.7	4.4	61.	226.0	16.1
800.0	6588.	8.2	2.7	68.	230.0	27.5
750.0	8328.	4.5	.7	76.	231.1	34.2
700.0	10161.	.6	-1.8	64.	233.1	30.2
650.0	12101.	-3.7	-5.0	91.	239.6	29.0
600.0	14160.	-8.3	-8.6	98.	247.9	39.9
550.0	16360.	-12.6	-12.7	99.	247.5	54.6
500.0	18725.	-16.4	-25.8	44.	264.6	66.9
450.0	21293.	-22.9	-36.7	27.	265.4	64.1
400.0	24089.	-29.4	-41.1	31.	260.7	59.8
350.0	27171.	-36.8	-45.5	39.	252.0	49.1
300.0	30611.	-44.7			260.8	74.0
250.0	34564.	-49.5			264.7	107.2
200.0	39382.	-49.4			263.5	119.1
175.0	42231.	-52.8			265.8	112.5
150.0	45466.	-56.8				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL
14 FEB. 80 1300 HRS MST
ASCENSION NO. 86

UPPER AIR DATA
045002008G
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 9

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3989.0	879.0	14.3	5.7	56.0	1061.1	661.8	.0	.0	1.000278
4000.0	878.1	14.3	5.6	55.8	1060.6	661.8	232.3	.0	1.000278
4500.0	863.0	14.8	4.1	48.5	1040.2	662.3	232.3	1.2	1.000269
5000.0	847.5	11.5	2.4	53.5	1033.9	658.3	232.3	2.4	1.000264
5500.0	832.2	9.0	.9	57.0	1024.5	655.3	232.3	3.6	1.000259
6000.0	816.9	7.4	.9	63.3	1011.4	653.5	232.3	4.8	1.000257
6500.0	801.8	6.2	1.3	71.0	998.7	652.2	232.7	6.4	1.000255
7000.0	787.0	5.0	1.6	78.6	982.3	650.8	233.4	8.5	1.000253
7500.0	772.5	3.9	1.8	86.2	968.2	649.5	233.8	10.7	1.000250
8000.0	758.2	2.7	1.8	93.9	954.3	648.2	231.1	14.0	1.000247
8500.0	744.2	1.6	1.5	99.0	940.2	646.9	229.4	17.4	1.000244
9000.0	730.2	.9	.7	99.0	925.3	646.0	228.3	21.0	1.000239
9500.0	716.5	.1	-.1	99.0	910.7	645.0	227.6	24.9	1.000234
10000.0	703.1	-.7	-.9	99.0	896.3	644.0	227.2	28.7	1.000229
10500.0	689.9	-1.3	-1.4	99.0	881.2	643.4	229.0	32.0	1.000225
11000.0	676.8	-1.7	-1.9	99.0	866.1	642.8	230.6	35.4	1.000220
11500.0	664.0	-2.2	-2.3	99.0	851.3	642.2	232.1	36.9	1.000216
12000.0	651.4	-3.3	-3.5	98.7	833.5	640.9	233.9	36.7	1.000211
12500.0	638.9	-4.4	-4.6	98.5	820.0	639.5	235.6	36.2	1.000207
13000.0	626.8	-5.5	-5.7	98.2	813.7	638.1	236.6	35.0	1.000202
13500.0	614.8	-6.3	-6.9	96.0	800.9	637.1	238.1	34.6	1.000198
14000.0	602.9	-6.7	-8.1	89.9	786.8	636.5	240.6	37.3	1.000193
14500.0	591.3	-7.7	-8.7	92.4	774.3	635.4	243.6	39.7	1.000190
15000.0	579.8	-8.6	-9.6	92.6	762.2	634.2	245.9	42.3	1.000185
15500.0	568.5	-9.6	-11.2	88.0	750.3	633.0	249.5	45.6	1.000181
16000.0	557.4	-10.6	-12.7	84.7	738.6	631.7	251.7	48.6	1.000177
16500.0	546.5	-11.7	-14.2	81.4	727.1	630.4	253.6	51.5	1.000173
17000.0	535.8	-12.8	-16.5	73.8	716.2	629.9	256.4	54.4	1.000169
17500.0	525.2	-14.1	-19.6	63.0	705.7	627.5	259.2	57.4	1.000164
18000.0	514.8	-15.4	-22.5	54.5	695.3	626.0	260.5	59.9	1.000161
18500.0	504.5	-16.8	-24.1	52.8	685.1	624.9	260.4	62.0	1.000158
19000.0	494.3	-18.0	-25.0	54.2	674.6	623.4	260.5	63.6	1.000155
19500.0	484.3	-19.2	-25.3	58.1	663.9	621.0	260.8	63.2	1.000152
20000.0	474.5	-20.3	-25.7	62.0	653.4	619.6	261.1	62.8	1.000150
20500.0	464.9	-21.5	-26.1	65.9	643.1	618.2	261.6	61.8	1.000148
21000.0	455.4	-22.3	-26.9	66.1	632.1	617.2	262.3	60.0	1.000145
21500.0	446.0	-23.1	-27.8	64.9	621.0	616.2	263.2	58.1	1.000142
22000.0	436.9	-23.9	-28.2	67.4	610.4	615.2	262.5	56.5	1.000140
22500.0	427.9	-25.1	-27.7	79.0	600.6	613.7	261.5	55.0	1.000138
23000.0	419.0	-26.4	-29.5	74.5	591.1	612.2	260.9	54.8	1.000135

STATION ALTITUDE 3989.00 FEET MSL
14 FEB. 60 1300 HRS MST
ASCENSION NO. 86

UPPER AIR DATA
04500200
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 9 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
23500.0	410.2	-27.6	-32.7	61.5	581.9	610.5	260.6	55.1	1.000132
24000.0	401.6	-28.9	-36.3	48.5	572.8	608.9	258.9	55.6	1.000129
24500.0	393.2	-30.0	-37.9	45.6	563.1	607.6	257.2	55.8	1.000127
25000.0	384.9	-30.9	-38.9	45.1	553.4	606.4	256.7	54.3	1.000125
25500.0	376.6	-32.1	-40.2	44.1	544.2	604.9	256.9	52.5	1.000122
26000.0	368.5	-33.3	-41.6	42.7	535.2	603.3	257.8	50.4	1.000120
26500.0	360.5	-34.6	-43.0	41.4	526.4	601.8	258.1	50.0	1.000118
27000.0	352.8	-35.8	-44.5	40.1	517.7	600.2	258.1	50.7	1.000116
27500.0	345.1	-37.0	-45.9	38.8	509.2	598.6	258.7	51.8	1.000114
28000.0	337.7	-38.3	-47.3	37.5	500.8	597.1	259.7	53.1	1.000112
28500.0	330.4	-39.5	-48.8	36.2	492.6	595.5	261.4	56.1	1.000110
29000.0	323.1	-40.5	-51.7	28.6**	483.8	594.2	263.4	60.4	1.000108
29500.0	316.0	-41.4	-55.4	20.0**	475.0	593.0	264.6	65.2	1.000106
30000.0	309.0	-42.4	-60.7	11.3**	466.4	591.8	265.1	70.4	1.000104
30500.0	302.1	-43.3	-71.6	2.7**	457.9	590.6	265.6	75.7	1.000102
31000.0	295.3	-44.6			450.2	589.0	265.7	78.5	1.000100
31500.0	288.7	-46.0			442.8	587.1	265.8	81.1	1.000099
32000.0	282.2	-47.5			435.6	585.2	265.9	83.6	1.000097
32500.0	275.8	-48.1			426.8	584.4	266.0	86.2	1.000095
33000.0	269.5	-48.4			417.6	584.1	266.0	89.3	1.000093
33500.0	263.3	-48.6			408.5	583.8	266.0	93.0	1.000091
34000.0	257.3	-48.9			399.7	583.4	266.1	96.3	1.000089
34500.0	251.4	-49.1			391.0	583.1	266.2	99.4	1.000087
35000.0	245.7	-49.0			381.9	583.3	266.2	103.8	1.000085
35500.0	240.1	-48.7			372.7	583.6	266.1	108.9	1.000083
36000.0	234.6	-48.4			363.7	584.0	265.8	113.4	1.000081
36500.0	229.3	-48.1			355.0	584.4	265.4	117.8	1.000079
37000.0	224.1	-47.9			346.5	584.8	265.2	119.4	1.000077
37500.0	219.0	-47.6			338.1	585.1	265.0	120.0	1.000075
38000.0	214.0	-47.7			330.7	584.9	265.2	118.3	1.000074
38500.0	209.1	-48.5			324.2	583.9	265.5	114.8	1.000072
39000.0	204.3	-49.3			317.9	582.9	266.0	109.8	1.000071
39500.0	199.7	-50.0			311.7	581.9	266.6	102.5	1.000069
40000.0	195.0	-50.3			305.0	581.5	267.4	97.2	1.000068
40500.0	190.5	-50.7			298.4	581.1	267.8	93.8	1.000066
41000.0	186.1	-51.0			291.9	580.7	268.0	93.6	1.000065
41500.0	181.9	-51.3			285.6	580.2	268.0	95.2	1.000064
42000.0	177.7	-51.6			279.4	579.8	268.0	96.6	1.000062
42500.0	173.6	-52.0			273.3	579.4	268.0	97.9	1.000061
43000.0	169.5	-52.3			267.4	579.0	268.1	99.1	1.000060

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL
14 FEB. 80 1300 HRS MST
ASCENSION NO. 86

UPPER AIR DATA
04500200
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 9 CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
43500.0	165.6	-52.6			261.7	578.5	267.8	101.0	1.000058
44000.0	161.8	-53.7			256.8	577.1	267.5	103.0	1.000057
44500.0	158.0	-54.8			252.0	575.6			1.000056
45000.0	154.3	-55.9			247.4	574.2			1.000055
45500.0	150.6	-57.0			242.8	572.8			1.000054
46000.0	147.1	-57.8			238.0	571.6			1.000053
46500.0	143.6	-58.6			233.1	570.6			1.000052

STATION ALTITUDE 3989.00 FEET MSL
14 FEB. 80 1500 HRS MST
ASCENSION NO. 86

MANDATORY LEVELS
04500200 66
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 10

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	4916.	11.9	2.6	53.	232.3	2.2
800.0	6562.	6.1	1.4	72.	232.8	6.6
750.0	8287.	2.0	1.8	98.	230.0	15.9
700.0	10107.	-.9	-1.0	99.	227.6	29.4
650.0	12045.	-3.4	-3.6	99.	234.1	36.7
600.0	14109.	-6.9	-8.3	89.	241.2	36.0
550.0	16320.	-11.3	-13.7	82.	253.0	50.5
500.0	18694.	-17.4	-24.9	52.	260.4	62.8
450.0	21256.	-22.8	-27.4	65.	262.8	58.9
400.0	24058.	-29.2	-37.1	46.	258.5	55.7
350.0	27146.	-36.3	-45.0	40.	258.1	51.0
300.0	30597.	-43.6			265.7	76.7
250.0	34550.	-49.2			266.3	100.0
200.0	39369.	-50.0			266.7	103.3
175.0	42220.	-51.9			268.0	97.4
150.0	45467.	-57.2				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4047.27 FEET MSL
14 FEB. 60 1415 HRS MST
ASCENSION NO. 18

SIGNIFICANT LEVEL DATA
045018001B
LC-37

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE II

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
876.8	4047.3	14.0	7.1	63.0
865.6	4402.6	12.0	5.6	65.0
850.0	4902.5	11.0	5.3	68.0
804.8	6390.1	6.6	2.3	74.0
764.4	7774.4	3.9	2.4	90.0
700.0	10111.9	-.1	-.2	99.0
623.0	13151.1	-5.7	-8.7	79.0
578.8	15037.6	-9.0	-11.8	80.0
519.8	17747.3	-14.5	-20.7	59.0
507.6	18337.3	-16.4	-20.6	70.0
500.0	18710.6	-16.5	-24.4	60.0
495.4	18939.1	-16.7	-24.0	50.0
418.6	23027.3	-26.0	-35.5	40.0
400.0	24103.9	-28.8	-38.8	37.0
362.2	26411.9	-35.1	-43.2	43.0
342.0	27719.5	-38.5	-48.4	34.0
335.6	28145.8	-38.5	-49.5	30.0
300.0	30654.2	-44.0		
250.0	34651.2	-47.7		
224.8	36951.5	-49.8		
200.0	39471.5	-49.7		
150.0	45562.0	-58.0		
128.6	48721.9	-63.2		
114.4	51079.3	-66.0		
107.8	52270.7	-65.3		
100.0	53770.3	-67.8		
86.0	56742.8	-70.7		
80.2	58113.8	-69.4		
70.0	60806.3	-67.5		
66.2	61913.7	-68.5		
61.0	63541.0	-66.5		
58.4	64418.7	-63.2		
50.0	67537.3	-68.0		
48.0	68345.0	-69.4		
30.0	77751.2	-63.5		
25.6	81001.9	-59.7		
23.0	83202.6	-62.5		

UPPER AIR DATA
0450180018
LC-37

STATION ALTITUDE 4047.27 FEET MSL
14 FEB. 80 1415 HRS MST
ASCENSION NO. 18

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 12

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4047.3	876.8	14.0	7.1	63.0	1059.1	661.6	240.6	11.9	1.000282
4500.0	862.5	11.8	5.6	65.6	1050.3	658.9	228.7	13.8	1.000276
5000.0	847.0	10.7	5.1	68.4	1035.3	657.7	219.6	16.3	1.000272
5500.0	831.5	9.2	4.1	70.4	1022.0	655.9	213.2	19.2	1.000267
6000.0	816.4	7.8	3.1	72.4	1008.9	654.1	213.3	22.8	1.000262
6500.0	801.5	6.4	2.3	75.3	995.5	652.5	216.6	26.6	1.000257
7000.0	786.7	5.4	2.4	81.0	980.5	651.4	221.9	28.1	1.000254
7500.0	772.2	4.4	2.4	86.8	965.7	650.2	228.4	31.7	1.000251
8000.0	757.9	3.5	2.2	90.9	951.0	649.2	233.9	36.4	1.000247
8500.0	743.8	2.7	1.6	92.8	936.2	648.1	237.7	41.2	1.000243
9000.0	729.9	1.8	1.0	94.7	921.7	647.1	239.6	44.4	1.000238
9500.0	716.3	.9	.5	96.6	907.4	646.1	240.9	47.1	1.000234
10000.0	703.0	.1	-.1	98.6	893.3	645.0	241.6	48.4	1.000230
10500.0	689.7	-.8	-1.3	96.4	879.5	643.9	242.4	49.9	1.000224
11000.0	676.6	-1.7	-2.7	93.2	866.0	642.7	243.3	51.9	1.000219
11500.0	663.7	-2.7	-4.1	89.9	852.6	641.6	244.2	53.9	1.000213
12000.0	651.1	-3.6	-5.5	86.6	839.4	640.4	245.7	54.9	1.000208
12500.0	638.7	-4.5	-6.9	83.3	826.5	639.2	247.3	55.7	1.000203
13000.0	626.6	-5.4	-8.3	80.0	813.7	638.1	248.6	56.4	1.000199
13500.0	614.6	-6.3	-9.3	79.2	800.9	637.0	250.3	56.5	1.000194
14000.0	602.7	-7.2	-10.1	79.4	788.0	635.9	251.8	56.7	1.000191
14500.0	591.1	-8.1	-10.9	79.7	775.4	634.8	252.7	57.5	1.000187
15000.0	579.6	-8.9	-11.7	80.0	763.0	633.8	253.3	58.6	1.000183
15500.0	568.3	-9.9	-13.3	76.4	751.0	632.5	254.0	59.5	1.000179
16000.0	557.1	-11.0	-14.9	72.5	739.2	631.2	255.0	59.7	1.000175
16500.0	546.2	-12.0	-16.5	68.7	727.6	630.0	256.1	60.0	1.000171
17000.0	535.4	-13.0	-18.2	64.8	716.2	628.7	257.2	60.7	1.000168
17500.0	524.9	-14.0	-19.9	60.9	705.0	627.4	258.3	61.5	1.000164
18000.0	514.5	-15.3	-20.6	63.7	694.6	626.8	259.9	62.1	1.000161
18500.0	504.3	-16.4	-21.3	65.6	683.8	624.4	261.7	62.6	1.000159
19000.0	494.2	-16.8	-24.8	49.9	671.2	623.9	263.9	62.1	1.000154
19500.0	484.1	-18.0	-26.1	48.6	660.5	622.5	266.3	61.6	1.000151
20000.0	474.2	-19.1	-27.5	47.4	650.0	621.1	267.6	61.8	1.000149
20500.0	464.5	-20.3	-28.8	46.2	639.6	619.7	268.7	62.8	1.000146
21000.0	455.1	-21.4	-30.1	45.0	629.4	618.3	268.3	65.2	1.000143
21500.0	445.8	-22.5	-31.4	43.7	619.4	616.9	267.6	67.5	1.000141
22000.0	436.7	-23.7	-32.8	42.5	609.6	615.4	268.7	69.6	1.000138
22500.0	427.8	-24.8	-34.1	41.3	599.9	614.0	268.0	70.9	1.000136
23000.0	419.1	-25.9	-35.5	40.1	590.4	612.6	269.4	72.0	1.000133
23500.0	410.5	-27.2	-37.0	38.7	581.1	611.0	269.2	72.8	1.000131

STATION ALTITUDE 4047.27 FEET MSL
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UPPER AIR DATA
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GEODETIC COORDINATES
32.41141 LAT DEG
106.30352 LON DEG

TABLE 12 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(T)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	401.8	-28.5	-38.5	37.3	572.0	609.4	265.0	73.7	1.000129
24500.0	393.2	-29.9	-39.6	38.0	563.0	607.7	265.3	73.4	1.000127
25000.0	384.9	-31.2	-40.5	39.3	554.2	606.0	265.8	73.0	1.000125
25500.0	376.7	-32.6	-41.4	40.6	545.5	604.3	266.2	71.9	1.000123
26000.0	368.7	-34.0	-42.4	41.9	536.9	602.5	266.7	70.5	1.000121
26500.0	360.8	-35.3	-43.5	42.4	528.4	600.8	266.7	70.3	1.000119
27000.0	353.0	-36.6	-45.5	39.8	519.8	599.2	266.4	70.7	1.000116
27500.0	345.3	-37.9	-47.5	35.5	511.4	597.5	266.1	72.9	1.000114
28000.0	337.8	-38.5	-49.1	31.4	501.4	596.8	265.9	76.2	1.000112
28500.0	330.3	-39.3	-51.5	25.8**	492.0	595.6	265.7	80.7	1.000110
29000.0	323.0	-40.4	-54.6	19.8**	483.4	594.4	265.6	86.3	1.000108
29500.0	315.9	-41.5	-58.4	13.8**	475.0	593.0	265.4	92.5	1.000106
30000.0	308.9	-42.6	-63.6	7.8**	466.7	591.6	265.2	99.1	1.000104
30500.0	302.1	-43.7	-74.4	1.8**	458.6	590.2	265.2	103.0	1.000102
31000.0	295.3	-44.3			449.6	589.3	265.4	105.2	1.000100
31500.0	288.6	-44.8			440.3	588.7	265.7	105.3	1.000098
32000.0	282.1	-45.2			431.3	588.1	266.2	104.5	1.000096
32500.0	275.8	-45.7			422.4	587.5	266.6	103.7	1.000094
33000.0	269.6	-46.2			413.7	586.9	267.0	102.8	1.000092
33500.0	263.5	-46.6			405.2	586.3	267.5	101.0	1.000090
34000.0	257.5	-47.1			396.9	585.7	268.2	97.8	1.000086
34500.0	251.7	-47.6			388.7	585.1	268.9	94.7	1.000087
35000.0	246.0	-48.0			380.7	584.5	268.6	94.7	1.000085
35500.0	240.4	-48.5			372.7	583.9	268.8	94.8	1.000083
36000.0	234.9	-48.9			365.0	583.4	267.6	102.5	1.000081
36500.0	229.5	-49.4			357.4	582.8	266.2	112.8	1.000080
37000.0	224.3	-49.8			349.8	582.2	264.8	126.8	1.000078
37500.0	219.2	-49.8			341.8	582.2	263.6	144.1	1.000076
38000.0	214.1	-49.8			333.9	582.3	262.6	156.7	1.000074
38500.0	209.2	-49.7			326.2	582.3	262.2	164.0	1.000073
39000.0	204.4	-49.7			318.7	582.3	261.9	162.3	1.000071
39500.0	199.7	-49.7			311.4	582.3	262.1	149.0	1.000069
40000.0	195.1	-50.4			305.1	581.4	262.5	134.8	1.000068
40500.0	190.5	-51.1			298.9	580.5	263.3	118.7	1.000067
41000.0	186.1	-51.8			292.8	579.6	264.4	102.6	1.000065
41500.0	181.7	-52.5			286.9	578.7	265.4	98.8	1.000064
42000.0	177.5	-53.1			281.0	577.8	266.6	95.2	1.000063
42500.0	173.3	-53.8			275.3	576.9	267.5	93.9	1.000061
43000.0	169.3	-54.5			269.7	576.1	268.3	94.2	1.000060
43500.0	165.3	-55.2			264.3	575.2	269.0	94.4	1.000059

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4047.27 FEET MSL
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UPPER AIR DATA
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GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 12 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	161.5	-55.9			258.9	574.3	208.7	94.8	1.000058
44500.0	157.7	-56.6			253.7	573.4	208.3	95.2	1.000056
45000.0	154.0	-57.2			248.5	572.5	207.7	96.2	1.000055
45500.0	150.4	-57.9			243.5	571.5	206.4	99.7	1.000054
46000.0	146.8	-58.7			238.5	570.5	205.1	103.3	1.000053
46500.0	143.3	-59.5			233.7	569.4	204.0	106.5	1.000052
47000.0	139.9	-60.4			229.0	568.3	203.1	109.1	1.000051
47500.0	136.5	-61.2			224.3	567.2	202.2	111.7	1.000050
48000.0	133.2	-62.0			219.8	566.1	201.5	115.1	1.000049
48500.0	130.0	-62.8			215.3	565.0	201.0	119.6	1.000048
49000.0	126.8	-63.5			210.8	564.0	200.7	122.2	1.000047
49500.0	123.7	-64.1			206.2	563.2	201.0	123.6	1.000046
50000.0	120.7	-64.7			201.7	562.4	201.2	125.0	1.000045
50500.0	117.7	-65.3			197.3	561.6	201.5	119.6	1.000044
51000.0	114.9	-65.9			193.1	560.8	201.9	114.2	1.000043
51500.0	112.0	-65.8			188.2	561.0	200.9	106.5	1.000042
52000.0	109.3	-65.5			183.3	561.4	199.6	98.6	1.000041
52500.0	106.6	-65.7			178.9	561.1	197.7	93.9	1.000040
53000.0	103.9	-66.5			175.2	560.0	195.6	89.5	1.000039
53500.0	101.4	-67.3			171.6	558.9	195.0	92.1	1.000038
54000.0	98.8	-68.0			167.9	558.0	194.5	94.7	1.000037
54500.0	96.4	-68.5			164.0	557.3	194.0	96.8	1.000037
55000.0	94.0	-69.0			160.3	556.6	193.5	93.2	1.000036
55500.0	91.6	-69.5			156.7	556.0	193.0	89.7	1.000035
56000.0	89.3	-70.0			153.1	555.3	192.4	86.1	1.000034
56500.0	87.1	-70.5			149.6	554.6	191.7	80.5	1.000033
57000.0	84.9	-70.5			145.9	554.6	190.7	69.2	1.000032
57500.0	82.7	-70.0			141.9	555.3	189.3	58.0	1.000032
58000.0	80.7	-69.5			138.0	555.9	191.1	58.9	1.000031
58500.0	78.7	-69.1			134.3	556.5	195.3	46.2	1.000030
59000.0	76.7	-68.8			130.7	556.9	200.6	43.2	1.000029
59500.0	74.8	-68.4			127.2	557.4	207.3	43.7	1.000028
60000.0	72.9	-68.1			123.8	557.9	213.6	44.8	1.000028
60500.0	71.1	-67.7			120.6	558.4	213.6	46.2	1.000027
61000.0	69.3	-67.7			117.5	558.4	213.4	47.5	1.000026
61500.0	67.6	-68.1			114.9	557.8	212.7	47.9	1.000026
62000.0	65.9	-68.4			112.1	557.5	210.9	46.9	1.000025
62500.0	64.3	-67.8			109.0	558.3	209.0	45.8	1.000024
63000.0	62.7	-67.2			106.0	559.1	208.5	42.3	1.000024
63500.0	61.1	-66.6			103.1	560.0	208.6	37.7	1.000023

STATION ALTITUDE 4047.27 FEET MSL
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UPPER AIR DATA
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GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 12 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
640000.0	59.6	-64.8			99.7	562.4	208.7	33.0	1.000022
645000.0	58.2	-63.3			96.6	564.3	209.7	28.3	1.000022
650000.0	56.7	-64.1			94.5	563.3	271.0	23.6	1.000021
655000.0	55.3	-64.9			92.6	562.2	273.1	18.9	1.000021
660000.0	54.0	-65.6			90.6	561.2	273.5	18.0	1.000020
665000.0	52.7	-66.4			88.7	560.2	274.0	17.1	1.000020
670000.0	51.4	-67.2			86.9	559.1	274.5	16.3	1.000019
675000.0	50.1	-67.9			85.0	558.1	275.9	15.4	1.000019
680000.0	48.8	-68.8			83.3	557.9	275.0	14.5	1.000019
685000.0	47.6	-69.3			81.4	556.2	272.0	13.6	1.000018
690000.0	46.5	-69.0			79.3	556.7	275.5	12.2	1.000018
695000.0	45.3	-68.7			77.2	557.1	281.2	10.8	1.000017
700000.0	44.2	-68.4			75.2	557.5	288.6	9.4	1.000017
705000.0	43.1	-68.0			73.2	557.9	297.2	10.9	1.000016
710000.0	42.0	-67.7			71.3	558.4	302.6	13.7	1.000016
715000.0	41.0	-67.4			69.4	558.8	306.6	16.5	1.000015
720000.0	40.0	-67.1			67.6	559.2	313.5	18.3	1.000015
725000.0	39.0	-66.8			65.8	559.6	321.7	20.0	1.000015
730000.0	38.0	-66.5			64.1	560.1	328.4	22.0	1.000014
735000.0	37.1	-66.2			62.4	560.5	334.9	24.0	1.000014
740000.0	36.2	-65.9			60.8	560.9	341.2	26.0	1.000014
745000.0	35.3	-65.5			59.2	561.3	346.5	28.3	1.000013
750000.0	34.4	-65.2			57.7	561.8	342.6	30.2	1.000013
755000.0	33.6	-64.9			56.2	562.2	338.4	32.6	1.000013
760000.0	32.7	-64.6			54.7	562.6	328.2	36.3	1.000012
765000.0	31.9	-64.3			53.3	563.0	318.1	40.9	1.000012
770000.0	31.1	-64.0			51.9	563.4	299.3	47.0	1.000012
775000.0	30.4	-63.7			50.5	563.9	291.1	54.4	1.000011
780000.0	29.6	-63.2			49.2	564.5	285.4	61.9	1.000011
785000.0	28.9	-62.6			47.9	565.3	282.2	67.9	1.000011
790000.0	28.2	-62.0			46.6	566.0	279.5	74.0	1.000010
795000.0	27.5	-61.5			45.3	566.8	277.2	80.2	1.000010
800000.0	26.9	-60.9			44.1	567.6	276.7	85.0	1.000010
805000.0	26.2	-60.3			42.9	568.4	276.2	89.8	1.000010
810000.0	25.6	-59.7			41.8	569.2	275.8	94.7	1.000009
815000.0	25.0	-60.3			40.9	568.3			1.000009
820000.0	24.4	-61.0			40.0	567.5			1.000009
825000.0	23.8	-61.6			39.2	566.6			1.000009
830000.0	23.2	-62.2			38.4	565.8			1.000009

STATION ALTITUDE 4047.27 FEET MSL
14 FEB. 60 1415 HRS MST
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MANDATORY LEVELS
0450180018
LC-37

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 13

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	4899.	11.0	5.5	68.	221.2	15.8
800.0	6546.	6.3	2.4	70.	217.2	20.7
750.0	8275.	3.0	1.9	92.	230.1	39.1
700.0	10102.	-.1	-.2	99.	241.8	48.7
650.0	12039.	-3.7	-5.6	80.	245.9	55.0
600.0	14102.	-7.4	-10.3	60.	252.1	56.7
550.0	16310.	-11.6	-16.0	70.	255.7	59.9
500.0	18685.	-16.5	-22.4	60.	262.5	62.5
450.0	21258.	-22.0	-30.8	44.	268.0	66.5
400.0	24064.	-28.8	-38.8	37.	265.0	73.8
350.0	27146.	-37.1	-46.3	38.	266.3	70.9
300.0	30594.	-44.0			265.3	103.6
250.0	34577.	-47.7			268.9	94.5
200.0	39377.	-49.7			262.1	150.3
175.0	42220.	-53.6			267.2	93.8
150.0	45440.	-58.0			266.3	100.0
125.0	49156.	-63.9			260.8	123.0
100.0	53605.	-67.8			254.8	93.4
80.0	57972.	-69.4			252.1	49.6
70.0	60599.	-67.5			273.5	46.9
60.0	63646.	-65.2			268.7	34.5
50.0	67286.	-68.0			273.9	15.4
40.0	71678.	-67.1			312.2	16.1
30.0	77424.	-63.5			288.3	57.7
25.0	81134.	-60.3				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.


DATE
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